

# ONS Guidelines™ for Cancer Treatment–Related Skin Toxicity

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**BACKGROUND:** Management of cancer treatment-related skin toxicities can minimize treatment disruptions and improve patient well-being.

**OBJECTIVES:** This guideline aims to support patients and clinicians in decisions regarding management of cancer treatment-related skin toxicities.

**METHODS:** A panel developed a guideline for management of cancer treatment-related skin toxicities using GRADE (Grading of Recommendations, Assessment, Development, and Evaluation) for certainty of evidence and the National Academies of Sciences, Engineering, and Medicine criteria for trustworthy guidelines. The Cochrane risk-of-bias tool assessed risk of bias. A quantitative or narrative synthesis of the evidence was completed.

**RESULTS:** The panel issued seven conditional recommendations for epidermal growth factor receptor inhibitor rash, hand-foot skin reaction, hand-foot syndrome, and chemotherapy-induced alopecia. The panel suggested strategies for prevention and treatment for all toxicities except hand-foot syndrome, which only has a prevention recommendation.

**IMPLICATIONS FOR NURSING:** Cancer treatment-related skin toxicities can significantly affect quality of life. Incorporation of these interventions into clinical care can improve patient outcomes.

**KEYWORDS** skin toxicities; alopecia; GRADE; guidelines; side effect management

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Side effects of treatment that cause changes in appearance can be some of the most distressing toxicities to patients with cancer (Salzmann et al., 2019). The incidence of skin toxicities to systemic cancer therapies is reported to be as high as 90% for some systemic therapies (Salzmann et al., 2019). Patients often feel that these changes stigmatize them as patients with cancer and are a constant reminder of their disease (Salzmann et al., 2019). In addition, these side effects may be uncomfortable or painful, limit normal daily functioning, and leave permanent changes. Differing skin toxicities are caused by a variety of standard chemotherapies, targeted agents, and immunotherapies.

Common skin toxicities that will be covered by these guidelines include epidermal growth factor receptor inhibitor (EGFRI) rash, hand-foot skin reaction, hand-foot syndrome or palmar-plantar erythroderma, and chemotherapy-induced alopecia.

## Epidermal Growth Factor Receptor Inhibitor Rash

Acneiform rash is the most common dermatologic adverse event (AE) that occurs with EGFRI, with an incidence as high as 90% (Tan & Chan, 2009). This type of rash is often painful or pruritic and most commonly presents on the upper part of the body and head where sebaceous glands are dense (Braden & Anadkat, 2016). The rash develops within the first one to two weeks of the initiation of EGFRI therapy, peaks at around four to six weeks of therapy, and resolves by three to four months after the start of therapy (Lacouture et al., 2011). Patients may be left with residual erythema or hyperpigmentation (Lacouture et al., 2011). The severity of the rash varies and can lead to dose adjustments or treatment discontinuation in severe cases (Lacouture, 2006).